

1. The first step is to identify the problem. This involves understanding the symptoms and the context in which they are occurring.

installing a speaker in an electronic device;

commanding a digital equalizer in said electronic device to receive said standard sound signal and outputting said standard sound signal through a speaker in said electronic device;

commanding said CPU to perform a frequency response matching on said received sound signal with respect to a predetermined ideal frequency response data;

inputting said gains in said digital equalizer for storing; and

2. The process of claim 1, wherein said electronic device is manufactured to have said predetermined ideal frequency response data with said predetermined bandwidth based on specifications of said speaker to be installed in said electronic device prior to storing said ideal frequency response data in a memory of said electronic device so that when said electronic device is enabled a predetermined software in said CPU reads said ideal frequency response data

from said memory for generating said standard sound signal having said predetermined bandwidth through said sound control circuit.

3. The process of claim 1, wherein after said digital equalizer has received said sound signal from said sound control circuit, further comprising the steps of
5 commanding said digital equalizer to compensate said sound signal based on a predetermined initial gain, and sending said compensated sound signal to said speaker for outputting.

4. The process of claim 1, wherein after said microphone has received said compensated sound signal, further comprising said steps of commanding said
10 sound control circuit to convert said sound signal into a digital sound data, and sending said digital sound data back to said CPU.

5. The process of claim 1, further comprising said steps of:
commanding said CPU to perform a frequency response matching on said
received sound signal with respect to said outputted standard sound signal
15 based on a plurality of sampling frequencies;

calculating a set of equalization tuning gains corresponding to said frequency response compensation performed in said speaker in each of said plurality of sampling frequencies; and

inputting said gains in said digital equalizer for storing.

20 6. The process of claim 1, wherein said standard sound signal having said predetermined bandwidth is a standard sound file in an audible frequency range of 20Hz and 20KHz.